

REMARKS

New claims 15-22 are currently being added. Basis for the aforementioned new claims can be found throughout the specification, including page 3, lines 2-10, and the Examples.

The amendments presented herein do not introduce new matter within the meaning of 35 U.S.C. §132. Accordingly, the Examiner is respectfully requested to enter these amendments.

1. Rejection of Claims 8-9, 11, and 13 Under 35 U.S.C. §102(b)

The Office Action states claims 8-9, 11, and 13 are rejected under 35 U.S.C. §102(b) as being anticipated by DeNicola, Jr., et al. (U.S. Patent 5,286,791). In particular, the Office Action states,

DeNicola, Jr. et al. disclose an impact-modified graft copolymer composition to be used in an inject molding to make an article, comprising (A) 10-90 wt% of graft copolymer, (B) 90-10 wt% of at least one propylene polymer having a wide molecular weight distribution, and (C) 2-40 wt% of at least one rubber component, wherein the component B has a molecular weight distribution of 8-60 and a melt flow rate of 0.5-50 g/10 min; the component C can be an ethylene-propylene copolymer rubber having 30-70% ethylene content (abstract; col. 4, lines 25-31; col. 7, line 33, 46-48, and 62-63; Examples 1-5-especially line 9; claims 1 and 4). DeNicola, Jr. also disclose that the composition further comprises about 10-100 pph of a filler which can be talc, a calcium carbonate, and silicate (col. 3, lines 25-32; col. 10, lines 36-43). It is noted that the ethylene-propylene copolymer rubber reads on the partially xylene soluble olefin polymer rubber. Thus, the present claims are anticipated by the disclosure of DeNicola et al.

RESPONSE

Applicant respectfully traverses the rejection of claims 8-9, 11, and 13.

As outlined in Applicant's previous responses of April 17, 2007 and January 15, 2008, for a reference to anticipate an invention, all of the elements of that invention must be present in the reference. The test for anticipation under section 102 is whether each and every element as set forth in the claims is found, either expressly or inherently, in a single prior art reference. *Verdegaal Bros. V. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must also be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

Accordingly, Applicant respectfully believes U.S. Patent 5,286,791 (herein referred to as "DeNicola, Jr., et al.") does not disclose, teach, or suggest the currently claimed polyolefin composition, which comprises: (A) from 60 to 85% by weight of a broad molecular weight distribution propylene polymer having a polydispersity index from 5 to 15, and a melt flow rate of from 20 to 78 g/10 min according to ASTM-D 1238, condition L; and (B) from 15 to 40% by weight of a partially xylene-soluble olefin polymer rubber comprising at least 65% by weight of ethylene, wherein the

polyolefin composition comprises a melt flow rate of from 5 to 20 g/10 min. In fact, as discussed in Applicant's aforementioned responses, DeNicola, Jr., et al. discloses an impact modified graft copolymer composition comprising, by weight: (A) from 10 to 90% of a graft copolymer of propylene polymer material having graft polymerized thereto one or more vinyl monomer(s); (B) from 90 to 10% of at least one broad molecular weight distribution propylene polymer material having a M_w/M_n of 8 to 60, a melt flow rate of 0.5 to 50, and a xylene insolubles at 25°C of greater than or equal to 94%; and (C) from 2 to 25% of at least one rubber component, wherein the total amount of (A)+(B)+(C) is 100%. Therefore, Applicant respectfully believes DeNicola, Jr., et al. clearly relates to an **impact modified graft copolymer** composition comprising, in part, from 10 to 90% by weight of a **propylene graft copolymer material**, with the propylene graft copolymer material having one or more vinyl monomer(s) grafted thereto, and not to the currently claimed polyolefin compositions comprising from 60 to 85% by weight of a broad molecular weight distribution propylene polymer having a polydispersity index from 5 to 15 and a melt flow rate of from 20 to 78 g/10 min according to ASTM-D 1238, condition L; and from 15 to 40% by weight of a partially xylene-soluble olefin polymer rubber comprising at least 65% by weight of ethylene.

Additionally, DeNicola, Jr., et al., clearly outlines the importance of the propylene graft copolymer material, and even states, "The present invention relates to compositions comprising a

graft copolymer . . . in particular, to an impact modified graft copolymer composition comprising a graft copolymer of propylene polymer material. . . ." See col. 1, lines 8-16. As such, Applicant believes DeNicola, Jr., et al. clearly relates to **an impact modified graft copolymer composition**, with the impact modified graft copolymer composition comprising a graft copolymer of propylene polymer material, whereas the instant application relates to polyolefin compositions comprising from 60 to 85% by weight of a broad molecular weight distribution propylene polymer having a polydispersity index from 5 to 15 and a melt flow rate of from 20 to 78 g/10 min according to ASTM-D 1238, condition L; and from 15 to 40% by weight of a partially xylene-soluble olefin polymer rubber comprising at least 65% by weight of ethylene.

Furthermore, Applicant respectfully believes DeNicola, Jr., et al. does not disclose, teach, or suggest Applicant's specifically claimed component (A) (i.e., from 60 to 85% by weight of a broad molecular weight distribution propylene polymer having a polydispersity index from 5 to 15 and a melt flow rate of from 20 to 78 g/10 min according to ASTM-D 1238, condition L). In fact, DeNicola, Jr., et al. discloses a very broad range of impact modified graft copolymer compositions, with the impact modified graft copolymer compositions comprising, in addition to the critical graft copolymer (i.e., component (A) of DeNicola, Jr., et al.), from 10% to 90% of a propylene copolymer material. Accordingly, Applicant respectfully believes the very broad, generic disclosure

of the propylene copolymer material in DeNicola, Jr., et al. clearly does not anticipate Applicant's specifically claimed component (A), let alone the specifically claimed range of 60 to 85% by weight of component (A). In order to anticipate the claims, the claimed subject matter must be disclosed in the reference with "sufficient specificity to constitute an anticipation under the statute." See *Atofina v. Great Lakes Chem. Corp*, 441 F.3d 991, 999, 78 USPQ2d 1417, 1423 (Fed. Cir. 2006), and MPEP §2131.03 (II).

Moreover, Applicant respectfully believes DeNicola, Jr., et al. does not disclose, teach, or suggest Applicant's specifically claimed polyolefin compositions comprising components (A) and (B), wherein the resultant polyolefin compositions comprises a melt flow rate of from 5 to 20 g/10 min. In fact, Applicant respectfully believes DeNicola, Jr., et al. is completely silent in this respect. The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must also be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

Notwithstanding all of the arguments provided *supra* and in Applicant's previous responses, Applicant has added new claims 15-22. In particular, new claims 15 and 16 relate to the partially xylene-soluble olefin polymer rubber comprising about 25 to 40% by weight, and about 30 to 38% by weight, of a xylene-insoluble portion, respectively. However, not only does DeNicola, Jr., et al. not disclose Applicant's currently claimed xylene-insoluble portion

in the partially xylene-soluble olefin rubber, but the specific olefin rubber examples provided in DeNicola, Jr., et al. (i.e., component (C)), such as EPR and EPDM, are believed to be highly soluble, if not completely soluble in organic solvents, including xylene at room temperature. Therefore, Applicant respectfully believes DeNicola, Jr., et al. fails to disclose, teach, or suggest Applicant's currently claimed compositions, wherein the partially xylene-soluble olefin polymer rubber comprises about 25 to 40% by weight, and about 30 to 30% by weight, of a xylene-insoluble portion as recited in claims 15 and 16, respectively.

Additionally, it is noted the examples in DeNicola, Jr., et al. require a compatibilizer (i.e., Kraton G-1652), as well as high energy and aggressive extruding techniques (i.e., high temperatures, high rpm, etc.) to try and adequately homogenize the polymers disclosed therein, given the vast differences in properties between all three components, including components (B) and (C). However, Applicant has unexpectedly found that when a olefin polymer rubber comprising a high xylene-insoluble portion is used, not only is a compatibilizer not required, but more conventional extruding techniques can be employed, while producing products comprising relatively high flexural modulus values and low thermal shrinkage. See page 1, lines 24-30, in Applicant's specification.

As for new claims 17-22, new claim 17 relates to polyolefin compositions comprising from 15 to 40% by weight of component (B) (i.e., a xylene-soluble olefin polymer rubber), wherein the xylene-

soluble olefin polymer rubber comprises **more than 70% by weight of ethylene**. Furthermore, claims 18-22 depend directly from claim 17, and include all of the limitation therein.

Accordingly, given DeNicola, Jr., et al. clearly relates to completely different compositions, Applicant respectfully believes the currently claimed polyolefin compositions are not anticipated, and are patentably distinguishable over DeNicola, Jr., et al. In light of the above, claims 8, 9, 11, 13, and 15-22 are therefore believed to be patentable over DeNicola, Jr., et al. As such, allowance of the claims is earnestly requested.

CONCLUSION

Based upon the above remarks, the presently claimed subject matter is believed to be novel and patentably distinguishable over the prior art of record. The Examiner is therefore respectfully requested to reconsider and withdraw the rejection, and allow pending claims 8, 9, 11, 13, and 15-22. Favorable action with an early allowance of the claims pending in this application is earnestly solicited.

The Examiner is welcomed to telephone the undersigned practitioner with any questions or comments if it is believed such contact will expedite prosecution for this application.

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Respectfully submitted,

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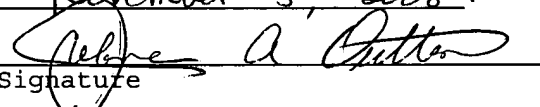
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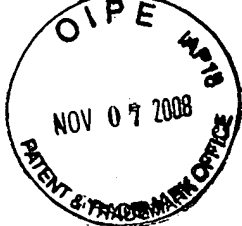
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ATTACHMENT A

Claims 1 - 7: (Cancelled)

8. (Previously Presented) A polyolefin composition comprising:

(A) from 60 to 85% by weight of a broad molecular weight distribution propylene polymer having a polydispersity index from 5 to 15 and a melt flow rate of from 20 to 78 g/10 min according to ASTM-D 1238, condition L; and

(B) from 15 to 40% by weight of a partially xylene-soluble olefin polymer rubber comprising at least 65% by weight of ethylene,

wherein the polyolefin composition comprises a melt flow rate of from 5 to 20 g/10 min.

9. (Previously presented) The polyolefin composition of claim 8 further comprising from 0.5 to 3 parts by weight of mineral fillers, with respect to the sum of components (A) and (B).

10. (Cancelled)

11. (Previously presented) The polyolefin composition of claim 8, wherein the partially xylene-soluble olefin polymer is a poly(ethylene-co-propylene).

12. (Cancelled)

13. (Previously presented) Articles produced comprising the polyolefin composition of claim 8.

14. (Cancelled)

15. (New) The polyolefin composition of claim 8, wherein the partially xylene-soluble olefin polymer rubber comprises about 25 to 40% by weight of a xylene-insoluble portion.

16. (New) The polyolefin composition of claim 8, wherein the partially xylene-soluble olefin polymer rubber comprises about 30 to 38% by weight of a xylene-insoluble portion.

17. (New) A polyolefin composition comprising:

(A) from 60 to 85% by weight of a broad molecular weight distribution propylene polymer having a polydispersity index from 5 to 15 and a melt flow rate of from 20 to 78 g/10 min according to ASTM-D 1238, condition L; and

(B) from 15 to 40% by weight of a partially xylene-soluble olefin polymer rubber comprising more than 70% by weight of ethylene,

wherein the polyolefin composition comprises a melt flow rate of from 5 to 20 g/10 min.

18. (New) The polyolefin composition of claim 17, further comprising from 0.5 to 3 parts by weight of mineral fillers, with respect to the sum of components (A) and (B).

19. (New) The polyolefin composition of claim 17, wherein the partially xylene-soluble olefin polymer is a poly(ethylene-co-propylene).

20. (New) Articles produced comprising the polyolefin composition of claim 17.

21. (New) The polyolefin composition of claim 17, wherein the partially xylene-soluble olefin polymer rubber comprises about 25 to 40% by weight of a xylene-insoluble portion.

22. (New) The polyolefin composition of claim 17, wherein the partially xylene-soluble olefin polymer rubber comprises about 30 to 38% by weight of a xylene-insoluble portion.